

**TIDA-SMD TYPE ( Rev. 1.0 )**



TIDA, a full series of inductor module for LPF used in the digital amplifier featuring with higher efficiency and lower heat generation.

**Features**

- \* Space reduction is realized by cohered structure
- \* The optimal design realizes high quality sound and low distortion
- \* Small size and SMD type, magnetic shielded
- \* High current, low resistance

**Applications**

- \* Car audios, home theater sets and large LCDs

**Operating & Storage Condition**

- \* Operating Temp : -40 to +125°C
- \* Storage Temp : -40 to +85°C
- \* Storage Life Time : 12 months @25°C , RH 65%

**Product Identification**

TIDA      1010      -      220      M  
 1              2                              3                              4

**Test Equipment**

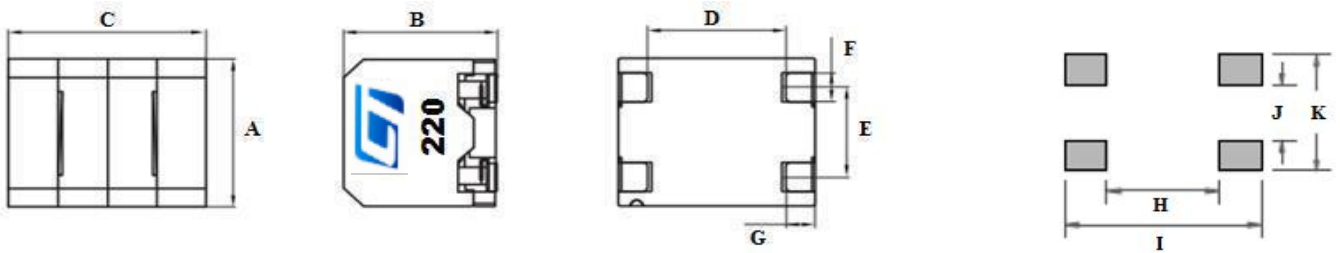
- \* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q,RDC
- \* HP8753D Network Analyzer- SRF

**Standard Atmospheric Conditions**

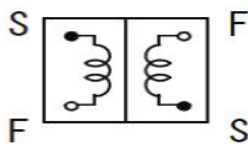
- \* Ambient Temp : 20±15°C
- \* Relative Humidity : 65±20%

1. Product Code
2. Size Code
3. Inductance: 22uH
4. Tolerance: M= ±20%

**Dimension & Recommended PAD Layout: [ mm ]**



**Schematic:**



**Construction:**



Size Code	A(±0.3)	B(max.)	C(±0.3)	D(±0.3)	E(±0.3)	F(ref.)	G(±0.3)	H(ref.)	I(ref.)	J(ref.)	K(ref.)
0910	9.0	10.0	10.0	6.2	5.5	1.2	1.9	5.5	11.0	3.5	7.6
1010	10.5	10.5	12.8	9	6.4	1.2	1.9	8	14	4.2	8.6



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## Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
TIDA0910-100M	10.0	20.0	6.0	4.5
TIDA0910-120M	12.0	22.0	5.5	4.0
TIDA0910-150M	15.0	30.0	5.0	3.0
TIDA0910-220M	22.0	32.0	4.0	2.5
TIDA1010-100M	10.0	16.0	7.6	7.2
TIDA1010-120M	12.0	18.0	6.2	5.5
TIDA1010-150M	15.0	22.0	5.5	5.0
TIDA1010-180M	18.0	24.0	5.0	4.8
TIDA1010-220M	22.0	28.0	4.3	4.5
TIDA1010-270M	27.0	27.4	3.8	4.1

\* Test Condition: @1KHz/ 1.0V, 25°C Ambient

\* Isat.: This indicates the value of DC current when the inductance becomes 25% lower than its nominal value.

\* Irms.: The DC current at which the temperature rise is  $\Delta T \leq 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

\* Tolerance: K= $\pm 10\%$ , M= $\pm 20\%$ , N= $\pm 30\%$

## Characteristics of DC Superposition:

